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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/812,725

03/30/2004

David E. Stout

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4813

7590

08/21/2006

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EXAMINER

LE, DANG D

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/812,725

Applicant(s)

STOUT ET AL.

Examiner

Dang D. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-9 and 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/6/06 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 3-9, and 11-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen (2,142,067) in view of Dade et al. (5,783,893).

Regarding claims 1 and 15, Allen shows a generator (Figure 1) comprising:

- A rotor frame (21) including a cylindrical body, the cylindrical body having an inner surface, an outer surface, a first end (left), and a second end, the inner surface defining an inner cavity;
- A drive shaft (91) coupled to the cylindrical body first end along an axis;
- A generator housing (29) having an inner surface that defines a substantially cylindrical cavity about the axis;
- The single rotor armature (14) with two circumferential surfaces (for 42 and 53, Figure 4);
- A first stator (13) fixedly coupled (through 32 and 12) to the generator housing (29) and extending into the interior cavity via the cylindrical body second end (right), the first stator positioned within the space defined by the single rotor armature and substantially aligned with the driveshaft along the axis, and not surrounding the drive shaft (91); and
- A second stator (12) surrounding the single rotor armature and fixedly coupled to the generator housing (29) inner surface (through 31).

Allen does not shows a first rotor armature coupled to the inner surface of the cylindrical body, the first rotor armature defining a space to receive a stator assembly; a second rotor armature coupled to the outer surface of the cylindrical body and electrically coupled to the first rotor armature.

Dade et al. shows a first rotor armature (98, Figure 3) coupled to the inner surface of the cylindrical body (54), the first rotor armature defining a space to receive a stator assembly (38); a second rotor armature (90) coupled to the outer surface of the cylindrical body and electrically coupled to the first rotor armature (column 4, line 25) for the purpose of preventing undesirable induction of current in the damaged stator.

Since Allen and Dade et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to split the single armature into two different first and second rotor armatures connected by the cylindrical body as taught by Dade et al. for the purpose discussed above.

Regarding claims 11-14, it is noted that Dade et al. also shows all of the limitations of the claimed invention (Figure 1) including a flange (16) coupled to the generator housing (12) to enclose the first stator, second stator, first rotor armature and second rotor armature, the flange including a passage (near 20) to permit the driveshaft to extend outside the generator housing, bearings (24, 26), windings (84, 86, Figure 3).

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6. Claims 3, 4, 7-9, 16, 17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Dade et al. as respectively applied to claims 1 and 15, and further in view of Syverson (3,676,764).

Regarding claims 3, 16, 19, and 20, the machine of Allen modified by Dade et al. shows all of the limitations of the claimed invention except for a direct current applied to the first stator generator generates a static magnetic field which induce an alternating current in the first rotor armature when the drive shaft is rotated.

Syverson teaches to apply a direct current to the first stator generator (core 15 and winding 21) in order to generate a static magnetic field which induces an alternating current in the first rotor armature (core 14 and winding 23) when the drive shaft is rotated for the purpose of making a generator without using brushes and commutator.

Since Allen, Dade et al., and Syverson are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to apply a direct current to the first stator generator in order to generate a static magnetic field which induce an alternating current in the first rotor armature when the drive shaft is rotated as taught by Syverson for the purpose discussed above.

Regarding claims 4, 7-9, and 17, it is noted that Syverson also shows all of the limitations of the claimed invention including the rectifying diodes (28a) coupled

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between first and second rotor armatures (22, 23) and induced alternating current in the stator.

7. Claims 5, 6, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Dade et al. and Syverson as respectively applied to claims 4 and 17 above and further in view of Giuffrida (4,647,806).

Regarding claims 5, 6, and 18, the machine of Allen modified by Dade et al. and Syverson includes all of the limitations of the claimed invention except for a full-wave bridge and a diode ring.

Giuffrida teaches to use a full-wave bridge and a diode ring for the purpose of providing clean power and mounting the diodes.

Since Allen, Dade et al., Syverson, and Giuffrida are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use a full-wave bridge and a diode ring as taught by Giuffrida for the purposes discussed above.

***Information on How to Contact USPTO***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D. Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/16/06

A handwritten signature in black ink, appearing to read 'Dangle', with a stylized flourish at the end.

DANGLE  
PRIMARY EXAMINER